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Appl. No. - U.S. National Phase of PCT/GB03/005204 Preliminary Amdt. dated 06/17/2005

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original): A composition for forming a fire resistant material comprising a plurality of

expandable beads of a polymeric material, wherein the polymeric material comprises 5

polystyrene, said beads being coated with an exfoliable graphite, characterised in

that the exfoliable graphite is adhered to the beads with a resin having a solubility

parameter of within substantially 0.5(cal cm⁻³)^{1/2} of the solubility parameter of the

polymeric material.

2. (currently amended): A composition according to any preceding claim 1

characterised in that the resin comprises an emulsion comprising one or more of a

styrene/acrylic copolymer, a styrene homopolymer, a vinyiidene vinyl chloride

copolymer, methylphenyl siloxane.

3. (currently amended): A composition according to claim 1 or 2 characterised in that

the resin includes a halogenated flame retardant.

- 4. (original): A composition according to claim 3 characterised in that the resin includes a synergist comprising an oxide of an element of Group 6B of the Periodic Table.
- 5. (currently amended): A composition according to claim 3 or 4 characterised in that the halogenated flame retardant comprises a brominated flame retardant.
- 6. (currently amended): A composition according to claim 3[[,]] 4 or 5 characterised in that the flame retardant comprises hexabromocyclododecane.
- 7. (currently amended): A composition according to claim 3 [[,]] 4 [[,]] 5 or 6 characterised in that the synergist comprises tungsten oxide.
- 8. (currently amended): A composition according to any of claim[[s]] 3 to 7 4 characterised in that the synergist comprises yellow tungsten oxide.
- 9. (currently amended): A composition according to any preceding claim 1 characterised in that the expandable beads comprise partially expanded polystyrene beads.

10. (original): A method of forming a fire resistant material comprising: providing a composition according to any preceding claim; and thereafter causing or allowing said beads to expand and fuse together.

11. (currently amended): A fire resistant material comprising a composition according to any of claim[[s]] 1 to 11 wherein the beads have been allowed to expand and fuse together.

12. (currently amended): A fire carrier formed of a fire resistant material according to claim 11 arranged between non-flammable outer skins where the fire resistant material contains sufficient exfoilable graphite substantially to fill the cavity between the skins on expansion thereof after melting and loss of within substantially 0.5(cal cm⁻³)^{1/2} of the polymeric material in a fire situation.